

Detering Asymmetric Threats from Sub-State Actors

R.V. Homsy

This article was submitted to
Strategic Stability Round Table, Springfield, VA, March 12-13, 2002

January 31, 2002

U.S. Department of Energy

Lawrence
Livermore
National
Laboratory

DISCLAIMER

This document was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor the University of California nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or the University of California. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or the University of California, and shall not be used for advertising or product endorsement purposes.

This is a preprint of a paper intended for publication in a journal or proceedings. Since changes may be made before publication, this preprint is made available with the understanding that it will not be cited or reproduced without the permission of the author.

This report has been reproduced directly from the best available copy.

Available electronically at <http://www.doe.gov/bridge>

Available for a processing fee to U.S. Department of Energy
and its contractors in paper from
U.S. Department of Energy
Office of Scientific and Technical Information
P.O. Box 62
Oak Ridge, TN 37831-0062
Telephone: (865) 576-8401
Facsimile: (865) 576-5728
E-mail: reports@adonis.osti.gov

Available for the sale to the public from
U.S. Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161
Telephone: (800) 553-6847
Facsimile: (703) 605-6900
E-mail: orders@ntis.fedworld.gov
Online ordering: <http://www.ntis.gov/ordering.htm>

OR

Lawrence Livermore National Laboratory
Technical Information Department's Digital Library
<http://www.llnl.gov/tid/Library.html>

Detering Asymmetric Threats from Sub-State Actors

Robert V. Homsy
Lawrence Livermore National Laboratory^a
925-422-6484
email: homsy1@llnl.gov

Submitted to: Strategic Stability Round Table
March 12 and 13, 2002
Defense Threat Reduction Agency
Threat Reduction Support Center
Springfield, VA

Deterrence means preventing another's actions by influencing their decisionmaking process. Nuclear deterrence was successfully accomplished during the Cold War by holding the adversary's valuable assets at risk by targeting them with nuclear weapons, a policy known as mutually assured destruction (MAD). In this case neither player attacks the other, because the ultimate outcome is self-destruction.

Deterrence based upon MAD is largely ineffective against sub-state actors who may have few if any assets, the location of which may be unknown. Furthermore, the threat of destroying their assets may only serve to strengthen their motivation to do more stealthy violence, the threat being interpreted as a taunt.

The key to establishing deterrence is understanding the adversary's decision process, starting with the factors upon which decisions are made, called decision attributes. Asymmetric threats are assumed to involve chemical, biological, radiological, or nuclear (CBRN) weapons. So, the key decision attributes here are concerned with the acquisition and use of CBRN weapons. We have identified the following five countermeasure objectives for establishing deterrence:

- Reduce access to CBRN weapons, expertise, materials, and equipment
- Make CBRN weapons difficult to use
- Reduce the effectiveness of CBRN weapons
- Increase the likelihood of being caught acquiring and using CBRN weapons
- Establish a policy of retribution for acquiring and using CBRN weapons

It should be emphasized that an adversary's perception toward these objectives is most important in affecting their decisionmaking. Of course each adversary will respond differently toward these countermeasures, depending upon their motivations, objectives, preferences, resources, and willingness to gamble.

^a This work was performed under the auspices of the U.S. Department of Energy by the University of California, Lawrence Livermore National Laboratory under contract No. W-7405-Eng-48.

Motivation of violence is defined as the fundamental cause or driving force; absent which the intent to do violence no longer exists. Correct understanding of motivations requires adapting your adversary's perspective. This work builds upon an earlier study of bioterrorism target attractiveness that identified fundamental motivations and objectives of terrorism.¹

Reference

1. Robert V. Homsy, "Bioterrorism Threat Assessment and Target Attractiveness," Lawrence Livermore National Laboratory, Livermore, CA, UCRL-JC-144404-EXT-abs, June 30, 2001; see also, CBNP Summer Meeting 2001, Chemical and Biological National Security Program, DOE/NNSA, Washington, DC., July 24-26, 2001 meeting abstracts, pp. 19-20.